



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,045	01/11/2002	Ahmad Reza Kashani	UVB 0298 PA	2608
7590	06/02/2006		EXAMINER	
Killworth, Gottman, Hagan & Schaeff, L.L.P One Dayton Centre, Suite 500 Dayton, OH 45402-2023				PENDLETON, BRIAN T
		ART UNIT		PAPER NUMBER
		2615		

DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/044,045	KASHANI, AHMAD REZA	
	Examiner Brian T. Pendleton	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 20 March 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 2,3,6-23,25-41 and 66 is/are pending in the application.
 4a) Of the above claim(s) 8-16 and 25-28 is/are withdrawn from consideration.
 5) Claim(s) 34-41 is/are allowed.
 6) Claim(s) 2,3,6,7,17-23,29-33 and 66 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 11 January 2002 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claim 66 have been considered but are moot in view of the new ground(s) of rejection.

Election/Restrictions

This application contains claims 8-16 and 25-28 drawn to an invention nonelected without traverse in the response of 9/8/05. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 31 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 31 and 32 recite the limitation "second electronic feedback loop". There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 3, 6, 7, 17-22, 31-33, and 66 are rejected under 35 U.S.C. 102(b) as being anticipated by Sawada et al, US Patent 5,410,605. In figure 7, Sawada discloses an active vibration control system comprising noise sensors 60₁-60₄ (motion sensors measuring the acceleration resulting from the vibration of a wheel), acoustic wave sensors 61₁-61₄, a vibro-acoustic controller 70 which comprises an feedback loop to acoustic wave actuators 62 and 63, wherein the feedback loop is coupled to the noise sensors and acoustic wave actuators and the feedback loop generates its output from a signal from the noise sensors using processors 65 and 66. Independent claim 66 is rejected. Regarding dependent claims 2, 3, 6, 7, 17-22, and 31-33, the components of Sawada teach the limitations.

Claims 2, 3, 6, 7, 17-23, 31-33, and 66 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakao et al, US Patent 5,617,315. Nakao et al teach an active vibration damping system in figure 15 comprising motion sensor 32, acoustic wave sensor 2, vibro-acoustic controller (elements 10, 51) which has a feedback loop comprising filter F2 which is coupled to acoustic wave actuator 4. Claim 66 is rejected. Regarding claims 2, 3, 6, and 7, the motion sensor 32 meets the limitations of the claims. As to claims 17-22, the microphone 2 meets the limitations of the claims. Per claim 23, the additional electronic feedback loop consists of circuit element 52. Claims 31-33 are also rejected by the apparatus and method of Nakao et al.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakao et al in view of Fuller. Nakao et al et al do not disclose that the acoustic wave actuator and acoustic wave sensor are positioned to correspond to the location of the acoustic anti-node of a target acoustic mode within the vehicle. Fuller discloses an apparatus for noise reduction in an enclosure comprising a plurality of microphones 26 and actuators 24. As taught in column 8 lines 21-37, the microphones 26 are located to detect acoustic modes. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Nakao et al by positioning the microphone with regard to a target acoustic mode, as taught by Fuller, for the purpose of canceling a particular noise component.

Allowable Subject Matter

Claims 34-41 are allowed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hodgson et al, US Patent 5,526,292; Enamito et al, US Patent 6,192,133; and Shoureshi, US Patent 5,629,986.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (571) 272-7527. The examiner can normally be reached on M-F 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian T. Pendleton
Primary Examiner
Art Unit 2615

btp

